Psychiatric Comorbidities in Patients with OCD: Study from A Tertiary Centre of North India

Natasha[1], Rakesh Yaduvanshi[2], Raman Baliyan[3], Ramjan Ali[4], Abhinav Kuchhal[5], C. S. Sharma[6]

ABSTRACT

Introduction: Obsessive-compulsive disorder is a chronic psychiatric disorder with a lifetime prevalence rate of up to 3.3%. It is associated with substantial psychiatric co-morbidity. Major Depressive disorder and anxiety disorders are the two most common psychiatric co-morbidities. This study aimed to assess the frequency and nature of co-morbid psychiatric disorders in OCD.

Material and methods: 72 consecutive patients, with the diagnosis of OCD, fulfilling the inclusion and exclusion criteria were included in the study over one year. They were assessed by applying semi-Structured Self-prepared Pro-forma, YBOCS, and ICD-10 Checklist for Mental Disorders.

Results: Out of 72 participants, 45 (62.5%) were having psychiatric co-morbidities. Depressive episode (25,34.7%) was the most common psychiatric co-morbidity followed by Mixed anxiety and depressive disorder (16, 22.2%), and substance abuse disorder (10,22.2%). GAD and panic disorder were found in 6 (8.33%) subjects. A single case (1.39%) of psychosis and somatoform disorder was found.

Conclusion: Psychiatric co-morbidities are very common in the patient suffering from OCD. Depression and anxiety disorders are the two most common co-morbid disorders.

Keywords: Depressive Episode; Anxiety Disorders; OCD; Psychiatric Comorbidities

INTRODUCTION

Obsessive-Compulsive Disorder (OCD) is a chronic disorder in which a person has uncontrollable, reoccurring thoughts (obsessions) and behaviors (compulsions) that he or she feels the urge to repeat over and over. It is a common psychiatric problem with an estimated lifetime prevalence rate of 1–3%.[1,2]

OCD is associated with substantial psychiatric co-morbidity. In the Epidemiological Catchment Area (ECA) study, two-thirds of OCD sufferers had a co-morbid psychiatric disorder.[1] MDD (20%–67%), GAD (8%–32%), social phobia (8%–42%), and simple phobia (7%–22%) are the commonly reported co-morbidities. [3,4]

The main focus of this research was to find the frequency and nature of psychiatric co-morbidities in patients suffering from OCD and to further gather supportive evidence, especially in this geographical area.

MATERIAL AND METHODS

This hospital-based cross-sectional study was conducted in a tertiary care medical institute at Bareilly in Uttar Pradesh (India). Ethical approval from the Institutional Ethical Board was obtained and Informed consent from all the patients was taken. 72 consecutive patients, with the diagnosis of OCD, fulfilling the inclusion and exclusion criteria were included in the study over one year (Nov 2017 – Oct 2018).

2.1 Inclusion Criteria
1. Patients of both sexes between 18-65 years of age.
2. Those patients &/or accompanying relatives were willing to give written informed consent.

2.2 Exclusion Criteria
1. Patients having major medical/ or surgical illness.
2. Patients suffering from mental retardation or any other cognitive dysfunction.

2.3 Study Tools
1. Semi-Structured Pro-forma. (self-prepared)
2. Y BOCS (Yale- brown obsessive-compulsive scale).[5]
3. ICD 10 – Checklist for mental disorder. [6]

All subjects after fulfilling inclusion and exclusion criteria went through a thorough physical and mental status examination. Sociodemographic details were taken using semi-Structured Self-prepared Proforma. YBOCS was applied to assess the severity of OCD and psychiatric comorbidities were assessed by applying the ICD-10 Checklist for Mental Disorders.

STATISTICAL ANALYSIS

Statistical analysis was done using SPSS 22.0. Descriptive statistics like mean and percentages were used to evaluate the results.

[1]Junior Resident, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India, [2]Associate Professor, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India, [3]Junior Resident, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India, [4]Assistant Professor, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India, [5]Assistant Professor, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India, [6]Professor, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India

Corresponding author: Rakesh Yaduvanshi, Associate Professor, Department of Psychiatry, Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, India.

RESULTS

The mean age of the sample is 40.23 years (± 5.68). The sample consists of mostly male (61.1%), Hindu (76.4%), married (48.7%), people from urban domicile (51.4%), and the nuclear family (55.4%).

Y-BOCS revealed that out of 72 patients, most were having symptoms of moderate (56.9%) severity, followed by severe (30.6%), extreme (6.9%), and mild (5.6%).

Out of 72 participants, 45 (62.5%) were having psychiatric

Psychiatric co-morbidity absent	27 (37.5%)	
Psychiatric co-morbidity present	45 (62.5%)	
	Depressive episode	25 (34.7%)
	Mixed anxiety and depressive disorder	16 (22.2%)
	Substance use disorder	10 (13.9%)
	Generalized anxiety disorder	6(8.3%)
	Panic disorder	6(8.3%)
	Psychosis	1(1.4%)
	Somatoform disorder	1(1.4%)

Table-1: Psychiatric comorbidity in OCD

Variables		Subjects	Depressive episode		Substance use disorder		Mixed anxiety & depressive disorder		GAD		Panic disorder		Psychosis		Somatoform disorder	
			n	%	n	%	n	%	n	%	n	%	n	%	n	%
Age	<30	26	12	46.1	4	15.4	5	19.2	2	7.7	2	7.7	0	0	1	3.9
	≥30	46	13	28.3	6	13.1	11	23.9	4	8.7	4	8.7	1	2.2	0	0
	P-value		0.781		0.782		0.645		0.882		0.882		0.449		0.180	
Gender	Male	44	13	29.5	8	18.2	12	27.3	4	9.1	3	6.8	0	0	0	
	Female	28	12	42.9	2	7.1	4	14.3	2	7.1	3	10.7	1	3.6	1	3.6
	P value		0.090		0.004*		<0.001*		0.144		0.559		0.421		0.421	
Religion	Hindu + Sikh	60	22	36.7	6	10.0	14	23.3	6	10.0	4	6.7	1	1.7	1	1.7
	Muslim	12	3	25.0	4	33.3	2	16.7	0	0	2	16.7	0	0	0	0
	P-value		0.180		0.032*		0.612		0.252		0.252		0.652		0.652	
Domicile	Rural	35	15	42.9	4	11.4	6	17.1	3	8.6	2	5.7	1	2.9	1	2.9
	Urban	37	10	27.0	6	16.2	10	27.0	3	8.1	4	10.8	0	0	0	0
	P -value		0.158		0.556		0.313		0.943		0.434		0.300		0.300	
Marital status	Married	47	13	27.7	5	10.6	12	25.5	4	8.5	5	10.6	1	2.1	0	0
	Unmarried	25	12	48.0	5	20.0	4	16.0	2	8.0	1	4.0	0	0	1	4
	P-value		0.084		0.274		0.354		0.938		0.332		0.462		0.167	
Type of family	Nuclear	40	16	40	3	7.5	7	17.5	3	7.5	3	7.5	1	2.5	1	2.5
	Joint	32	9	28.1	7	21.9	9	28.1	3	9.4	3	9.4	0	0	0	0
	P-value		0.292		0.079		0.281		0.774		0.774		0.367		0.367	
Education	< 12	15	4	26.7	1	6.7	3	20.0	2	13.3	2	13.3	1	6.7	0	0
	≥12	57	21	36.8	9	15.8	13	22.8	4	7.0	4	7.0	0	0	1	1.7
	P-value		0.461		0.363		0.816		0.431		0.431		0.049*		0.605	
Occupation	Employed	34	10	29.4	6	17.6	9	26.5	3	8.8	2	5.9	0	0	0	0
	Unemployed	38	15	39.5	4	10.5	7	18.4	3	7.9	4	10.5	1	2.6	1	2.6
	P-value		0.370		0.383		0.412		0.887		0.476		0.340		0.340	
Duration of illness	<2 years	29	11	37.9	4	13.8	8	27.6	3	10.3	2	6.9	0	0	0	0
	≥2 years	43	14	32.6	6	13.9	8	18.6	3	6.9	4	9.3	1	2.3	1	2.3
	P-value		0.638		1.00		0.368		0.612		0.717		0.408		0.408	
Severity of OCD	Mild-mod	45	17	37.8	6	13.3	10	22.2	3	6.7	3	6.7	0	0	1	2.2
	Sever/ext	27	8	29.6	4	14.8	6	22.2	3	11.1	3	11.1	1	3.7	0	0
	P-value		0.482		0.860		1.000		0.509		0.509		0.193		0.435	
History of treatment	Yes	31	8	25.8	4	12.9	12	38.7	2	6.4	0	0	0	0	1	3.2
	No	41	17	41.5	6	14.6	4	9.7	4	9.7	6	14.6	1	2.4	0	0
	P-value		0.167		0.833		0.003*		0.651		0.026*		0.381		0.246	

Table-2: Sociodemographic and clinical variables

comorbidities. Depressive episode (25,34.7%) was the most common co-morbidity followed by Mixed anxiety and depressive disorder (16, 22.2%), substance use disorder (10,22.2%). GAD and panic disorder were found in 6 (8.33%) subjects. A single case (1.39%) of psychosis and somatoform disorder was found. (Table 1)

There was no significant difference among different comorbid psychiatry disorders according to age, and marital status of patients. The depressive episode was found in 46.1% of subjects under 30 years of age and 28.3 % of participants above 30 years. Unmarried subjects were found to have depressive episodes (48% vs 27.7%) and substance abuse (20% vs 10.6%) more frequently than married ones. As for gender differences concerned, significantly more male subjects were having substance use (p 0.004) and mixed anxiety and depressive disorder (p<0.001) as psychiatric comorbidity. Depressive Episode was found in 29.5 % in male patients and 42.9 % in female patients, Substance Use disorder in 18.2 % male patients and 7.1 % in female patients, Mixed Anxiety and depressive disorder was found in 27.3% of male patients and 14.3% in female patients. Thus, In Males subjects, substance use disorders, mixed anxiety and depressive disorder, and GAD were more frequent occurrences whereas depressive episodes, panic disorder, psychosis, and somatoform disorder were more frequent among female participants. (Table 2)

In our study, 13.9% (n=10) of subjects were having co-morbid substance abuse disorder. Most of the subjects were having nicotine dependence (n=6). Alcohol dependence and cannabis dependence both were found in two patients. Muslims were found to having significantly more (P= 0.032) co-morbid substance use disorder than participants of other religion otherwise there is no significant difference in comorbid psychiatry disorder according to the religion of patients. (Table 2)

Domicile of the participants, family type, Socioeconomic status, and occupation didn't show any significant relation with any co-morbid psychiatric disorders. There was no significant difference in the category of the comorbid psychiatric disorder according to the education of patients except patients with psychosis as a comorbid psychiatric disorder. A depressive episode, mixed anxiety and depressive disorder, and generalized anxiety disorder were more in patients which have < 2years of the duration of illness while Substance Use disorder, Panic disorder, Psychosis, and Somatoform disorder were more in patients which have ≥ 2 years of duration of illness. There was no significant difference in the category of comorbid psychiatry disorder according to the duration of illness of patients. There was no significant difference in the category of comorbid psychiatry disorder according to the Severity of OCD of patients. (Table 2)

DISCUSSION

We conducted a cross-sectional study to identify the psychiatric co-morbidities and their correlates in patients with obsessive-compulsive disorder at a tertiary care center

in the Rohilkhand region in Uttar Pradesh.

4.1 Socio-demographic profile

The mean age of the participants was 40.23± 5.68 years. This is in accordance with previous studies.[7,8] Although OCD is a disorder of the young population, the first contact with psychiatrists is often delayed. Common barriers to seeking treatment were stigma, unawareness about the nature of the disorder, treatment option and psychiatric facilities, and inconveniences associated with treatment. This delay in treatment explains the mean age of the sample in different studies.[9]

Usually, OCD is a disorder that occurs equally in males and females. Our study sample consists of mostly male (61.1%) subjects. Other hospital-based Indian studies also pointed out male predominance in their sample.[10,11] Cherian et al (2012) attributed this difference in access to health care, to differing male and female social status in India.[12] The author believes that in our culture excessive cleanliness, which is the most common presentation of OCD, not considered abnormal for females as in males resulting in more probability of male patients in the hospital set up.

Following the demographic profile of the area, the Majority of the patients (55,76.4%) were Hindu, followed by Muslims (12,16.7%) and Sikh (5,6.9%) in our study.

The majority of patients were married (48.7%), followed by unmarried (34.7%), Divorced (9.7%), and Separated (6.9%) subjects. These results are following other studies conducted on OCD patients. [10,11,13]

We found that most of the patients (88.9%) were literate, these results are following the study findings done by Parmar et al. (2014) and Dar et al. (2017) where they found that 72% and 88% of patients were educated. [11,13]

An almost equal number of patients in urban and rural areas (51.4% and 48.6% respectively) are explained by population diversity of study area.

The majority of patients (56.9%) had no history of taking treatment (here treatment we mean psychiatric treatment). Delay in treatment is associated with poor outcome hence there is a need to raise awareness regarding the disorder in this geographical area.

4.2 Psychiatric Comorbidity

In present study, 62.5% (n=45) patients have additional psychiatric co-morbidities. In the ECA study, two-thirds of those with OCD had a co-morbid psychiatric disorder.[1] Sabuncuoğlu, et al (2004) reported psychiatric co-morbidity in 69% of the sample.[14] An Indian study by Dar et al (2017) reported that 62.82% of respondents with OCD had a comorbid psychiatric illness.[11] This supports the notion that co-morbidity is a rule rather than an exception in OCD.

In our study, 34.7 % of the participants were found to have depression. Consistent with other studies depressive episode was the most common co-morbid disorder.[3] The lifetime prevalence of depressive episodes in OCD was found up to 60–80% and at the time of evaluation about one-third of patients with OCD have concurrent MDD.[3,15] Four Indian studies in the last ten years by Khandelwal et al (2009), Dar

et al., (2017), Kalra et al (2008) and Parmar et al (2014) reported prevalence of depression in 28.8%, 29.4%, 38.8% and 44% of OCD patients respectively. [11,13,16,17]

Although none of the variables have found to have a significant bearing, In our study co-morbid depression is found more commonly in female (42.9% vs 29.5%), unmarried (48% vs 27.7%), unemployed (39.5% vs 29.4%), in subjects less than 30 years (46.1% vs28.3%), in participants of rural background (42.9% vs 27.03%) and the nuclear family (40% vs 28.1%).

A recent study by Chaudhry et al (2016) supports the finding that the co-morbidity of depression is more common in females, a consistent trend observed in Indian research on OCD.[18,19] A higher prevalence of depressive episode in unemployed is consistent with the previous findings and signified that the additional burden of co-morbidity increases the likelihood of being unemployed.[20] Less social support in nuclear families could be the reason for the higher percentage of the depressive episode there.

The lifetime prevalence of comorbid anxiety disorders in patients with OCD was noticed to be 25%–75%.[21] In our study, we find 38.9% of the patients had anxiety disorders. Mixed anxiety and depressive disorder was most common (22.2%) anxiety disorder. GAD and panic disorder both were present in 8.3 %. Dar et al., (2017) and Parmar et al., (2014) in their research reported that 26.3% and 30% of patients with OCD were having a comorbid anxiety disorder respectively. [11,13] Studies reported the prevalence of GAD ranged from 8 to 32%.[4] Ruscio et al (2008) reported GAD in 8 % similar to our study.[2] Our results are in line with Kalra et al (2008) who found panic disorder in 7.4% subjects.[17]

A higher prevalence of the panic disorder in females in our study was similar to other studies.[22] Consistent with the previous study by Navdeep Kaur et al (2018), marriage doesn't seem to affect the prevalence of anxiety disorder significantly, though anxiety disorder was more common in married participants in our study.[23] A higher number of married subjects in the sample could be a reason behind observed anxiety disorder in married patients.

Trivedi and Gupta (2010) in his review highlighted the higher prevalence of anxiety disorder in the urban population.[24] Our study also reported a similar trend. The duration of illness is meaningful variables affecting the expressions of comorbidities in OCD. The longer duration of illness was associated with depressive disorder and social phobia while the short duration of illness was associated with anxiety disorders.[25] In our study too, anxiety disorders were more common in patients with duration of illness less than two years. Similar to our study, other studies also reported that Anxiety disorders were more common in people with less education.[26] Awareness regarding mental health may be a reason behind the observed results.

In our study, 13.9% of subjects were having co-morbid substance abuse disorder. Our study is following the low prevalence of substance use disorders among OCD patients observed previously.[11,27] Muslims were found to having significantly more (P= 0.032) co-morbid substance use disorder than participants of other religions. All the Muslim patients (n=4) were having nicotine dependence which is common in this population.

Indian studies usually reported a low prevalence of psychosis. Khandelwal et al (2009) and Parmar et al (2014) reported reports only 1.5% and 4% of OCD patients respectively.[13,16]

CONCLUSION

Psychiatric co-morbidities are very common in patients with OCD. Depression and anxiety disorders are the two most common co-morbid disorders. Male OCD patients are more prone to have substance abuse disorder and mixed anxiety and depressive disorder, while depression is more common in females.

Limitations

1. The sample size was relatively small
2. Any other ongoing stressor along with OCD could have been a confounding factor
3. The place where the study was conducted is a district in Western U.P and had a catchment predominantly from this area and therefore the results could not be generalized to the whole population

Abbreviations

OCD: Obsessive-compulsive disorder, MDD: Major depressive disorder, GAD: Generalized anxiety disorder, Y BOCS: Yale- brown obsessive-compulsive scale.

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